ROY COOPER
Governor

MICHAEL S. REGAN
Secretary

MICHAEL ABRACZINSKAS
Director

NORTH CAROLINA
Environmental Quality

November XX, 2020

Mr. Bernard Schilberg
CEO
AMES Copper Group - Shelby
99 East River Drive
East Hartford, Connecticut 06108

SUBJECT: Air Quality Permit No. 10674R00
Facility ID: 2300397
AMES Copper Group - Shelby
Shelby, North Carolina
Cleveland County
Fee Class: Title V
PSD Class: Minor

Dear Mr Schilberg:

In accordance with your completed application received July 31, 2020, we are forwarding herewith Permit No. 10674R00 to AMES Copper Group - Shelby, Shelby, Cleveland County, North Carolina for the construction and operation of air emissions sources or air cleaning devices and appurtenances. Additionally, any emissions activities determined from your air permit application as meeting the exemption requirements contained in 15A NCAC 02Q .0102 have been listed for information purposes as an "ATTACHMENT" to the enclosed air permit. Please note the records retention requirements are contained in General Condition 2 of the General Conditions and Limitations.

If any parts, requirements, or limitations contained in this permit are unacceptable to you, you have the right to request a formal adjudicatory hearing within 30 days following receipt of this permit, identifying the specific issues to be contested. Such a request will stay the effectiveness of the entire permit. This hearing request must be in the form of a written petition, conforming to G.S. 150B-23 of the North Carolina General Statutes, and filed with the Office of Administrative Hearings, 6714 Mail Service Center, Raleigh, NC 27699-6714. The form for requesting a formal adjudicatory hearing may be obtained upon request from the Office of Administrative Hearings. Unless a request for a hearing is made pursuant to G.S. 150B-23, this air permit shall be final and binding

You may request modification of your air permit through informal means pursuant to G.S. 150B-22. This request must be submitted in writing to the Director and must identify the specific provisions or issues for which the modification is sought. Please note that the permit will become final and binding regardless of a request for informal modification unless a request for a hearing is also made under G.S. 150B-23.

Unless exempted by a condition of this permit or the regulations, construction of new air pollution sources or air cleaning devices, or modifications to the sources or air cleaning devices described in this permit must be covered under a permit issued by the Division of Air Quality prior to construction. Failure to do so is a violation of G.S. 143-215.108 and may subject the Permittee to civil or criminal penalties as described in G.S. 143-215.114A and 143-215.114B

This permit shall be effective from November XX, 2020 until October 31, 2028, is nontransferable to future owners and operators, and shall be subject to the conditions and limitations as specified therein.

Cleveland County has triggered increment tracking under PSD for particulate matter 10 (PM_{10}), particulate matter 2.5 ($PM_{2.5}$), sulfur dioxide (SO_2), and nitrogen oxide (NO_x) This modification will result in an increase in 4.90 pounds per hour of PM_{10}, 4.85 pounds per hour of $PM_{2.5}$, 0.14 pounds per hour of SO_2, and 22.26 pounds per hour of NO_x).

The Permittee is responsible for carefully reading the entire permit and evaluating the requirements of each permit stipulation. The Permittee shall comply with all terms, conditions, requirements, limitations and restrictions set forth in this permit. Noncompliance with any permit condition is grounds for enforcement action, for permit termination, revocation and reissuance, or modification, or for denial of a permit renewal application. Should you have any questions concerning this matter, please contact Richard Simpson at (919) 707-8476 or Richard.Simpson@ncdenr.gov.

Should you have any questions concerning this matter, please contact Richard Simpson at (919) 707-8476 or Richard.Simpson@ncdenr.gov.

Sincerely yours,

(for)

William D. Willets, P.E., Chief, Permitting Section
Division of Air Quality, NCDEQ

Enclosure

c: Kelly Fortin, EPA Region 4
Mooresville Regional Office
Connie Horne (Cover letter only)
Central Files

State of North Carolina
Department of Environmental Quality
Division of Air Quality

AIR QUALITY PERMIT

Permit No.	Replaces Permit No.(s)	Effective Date	Expiration Date
10674R00	New	November XX, 2020	October 31, 2028

Until such time as this permit expires or is modified or revoked, the below named Permittee is permitted to construct and operate the emission source(s) and associated air pollution control device(s) specified herein, in accordance with the terms, conditions, and limitations within this permit. This permit is issued under the provisions of Article 21B of Chapter 143, General Statutes of North Carolina as amended, and Title 15A North Carolina Administrative Codes (15A NCAC), Subchapters 02D and 02Q, and other applicable Laws.

Pursuant to Title 15A NCAC, Subchapter 02Q, the Permittee shall not construct, operate, or modify any emission source(s) or air pollution control device(s) without having first submitted a complete Air Quality Permit Application to the permitting authority and received an Air Quality Permit, except as provided in this permit.

Permittee: **AMES Copper Group - Shelby**
Facility ID: **2300397**

Facility Site Location: **135 Old Boiling Springs Road**
City, County, State, Zip: **Shelby, Cleveland County, North Carolina 28152**

Mailing Address: **135 Old Boiling Springs Road**
City, State, Zip: **Shelby, Cleveland County, North Carolina 28152**

Application Number: **2300397.20A**
Complete Application Date: **July 31, 2020**

Primary SIC Code: **3341**
Division of Air Quality: **Mooresville Regional Office**
Regional Office Address: **610 East Center Avenue, Suite 301**
Mooresville, North Carolina 28115

(the Permittee) is hereby authorized to construct and operate the air emissions sources and/or air cleaning devices and appurtenances described below:

Emission Source ID	Emission Source Description	Control System ID	Control System Description
TRF-1	tilting refinery furnace for secondary copper smelting (8 tons per hour and 20.47 million Btu per hour maximum heat input) consisting of charging and melting, oxidation and deslagging, and reduction processes	BH-1, DSI-1	dry sorbent injection system (ID No. DSI-1) installed in series with fabric filter (ID No. BH-1; 48,000 square feet of filter area)
SILO-1	sodium carbonate storage silo (750 pounds per hour maximum process rate)	BVF-1	bin vent filters

In accordance with the completed application 2300397.20A received July 31, 2020 including any plans, specifications, previous applications, and other supporting data, all of which are filed with the Department of Environmental Quality, Division of Air Quality (DAQ) and are incorporated as part of this permit.

This permit is subject to the following specified conditions and limitations including any TESTING, REPORTING, OR MONITORING REQUIREMENTS:

A. SPECIFIC CONDITIONS AND LIMITATIONS

1. Any air emission sources or control devices authorized to construct and operate above must be operated and maintained in accordance with the provisions contained herein. The Permittee shall comply with applicable Environmental Management Commission Regulations, including Title 15A North Carolina Administrative Code (NCAC), Subchapter 02D .0202, 02D .0515, 02D .0516, 02D .0521, 02D .0535, 02D .0540, 02D .1111 (40 CFR 63, Subpart FFFFFF -- Secondary Copper Smelting Area Sources), 02D .1112, 02D .1806, 02Q .0102, and 02Q .0315.

2. PARTICULATE CONTROL REQUIREMENT - As required by 15A NCAC 02D .0515 "Particulates from Miscellaneous Industrial Processes," particulate matter emissions from the emission sources shall not exceed allowable emission rates. The allowable emission rates are, as defined in 15A NCAC 02D .0515, a function of the process weight rate and shall be determined by the following equation(s), where P is the process throughput rate in tons per hour (tons/hr) and E is the allowable emission rate in pounds per hour (lbs/hr).

$$E = 4.10 * (P)^{0.67} \quad \text{for } P <= 30 \text{ tons/hr, or}$$
$$E = 55 * (P)^{0.11} - 40 \quad \text{for } P > 30 \text{ tons/hr}$$

3. SULFUR DIOXIDE CONTROL REQUIREMENT - As required by 15A NCAC 02D .0516 "Sulfur Dioxide Emissions from Combustion Sources," sulfur dioxide emissions from tilting refinery furnace (ID No. TRF-1) shall not exceed 2.3 pounds per million Btu heat input.

4. VISIBLE EMISSIONS CONTROL REQUIREMENT - As required by 15A NCAC 02D .0521 "Control of Visible Emissions," visible emissions from the emission sources, manufactured after July 1, 1971, shall not be more than 20 percent opacity when averaged over a six-minute period, except that six-minute periods averaging not more than 87 percent opacity may occur not more than once in any hour nor more than four times in any 24-hour period. However, sources which must comply with a visible emissions

standard in 15A NCAC 02D .0524 "New Source Performance Standards" or .1110 "National Emission Standards for Hazardous Air Pollutants" shall meet that standard instead of the 02D .0521 visible emissions standard.

5. NOTIFICATION REQUIREMENT - As required by 15A NCAC 02D .0535, the Permittee of a source of excess emissions that last for more than four hours and that results from a malfunction, a breakdown of process or control equipment or any other abnormal conditions, shall:

    a. Notify the Director or his designee of any such occurrence by 9:00 a.m. Eastern time of the Division's next business day of becoming aware of the occurrence and describe:

        i. the name and location of the facility,

        ii. the nature and cause of the malfunction or breakdown,

        iii. the time when the malfunction or breakdown is first observed,

        iv. the expected duration, and

        v. an estimated rate of emissions.

    b. Notify the Director or his designee immediately when the corrective measures have been accomplished.

    This reporting requirement does not allow the operation of the facility in excess of Environmental Management Commission Regulations.

6. FUGITIVE DUST CONTROL REQUIREMENT - As required by 15A NCAC 02D .0540 "Particulates from Fugitive Dust Emission Sources," the Permittee shall not cause or allow fugitive dust emissions to cause or contribute to substantive complaints or excess visible emissions beyond the property boundary. If substantive complaints are received or excessive fugitive dust emissions from the facility are observed beyond the property boundaries for six minutes in any one hour (using Reference Method 22 in 40 CFR, Appendix A), the owner or operator may be required to submit a fugitive dust plan as described in 02D .0540(f).

    "Fugitive dust emissions" means particulate matter that does not pass through a process stack or vent and that is generated within plant property boundaries from activities such as: unloading and loading areas, process areas stockpiles, stock pile working, plant parking lots, and plant roads (including access roads and haul roads).

7. 15A NCAC 02D .1111 "GENERALLY ACHIEVABLE CONTROL TECHNOLOGY" (40 CFR 63, Subpart FFFFFF)

    a. The Permittee shall comply with all applicable provisions for the tilting refinery furnace (TRF-1), including the notification, testing, reporting, recordkeeping, and monitoring requirements contained in Environmental Management Commission Standard 15A NCAC 02D .1111 "Generally Achievable Control Technology (GACT) as promulgated in 40 CFR Part 63, Subpart FFFFFF, National Emission Standards for Hazardous Air Pollutants for Secondary Copper Smelting Area Sources including Subpart A "General Provisions" according to such sources as identified in Table 1 to 40 CFR 63, Subpart FFFFFF. The definitions and nomenclature conditions of sources contained in 40 CFR 63.11158 shall apply for the requirements listed in Section 7 of this permit.

    Emission Limitations [40 CFR 63.11155]

b. The Permittee shall not discharge to the atmosphere any gases which contain particulate matter (PM) in excess of 0.002 grains per dry standard cubic foot (gr/dscf) from the exhaust vent of any capture system for a smelting furnace, melting furnace, or other vessel that contains molten material and any capture system for the transfer of molten material.
c. For each smelting furnace, melting furnace, or other vessel that contains molten material, the Permittee shall install and operate a capture system that collects the gases and fumes from the vessel and from the transfer of molten material and convey the collected gas stream to a control device.

Notifications [15A NCAC 02Q .0308(a) and 40 CFR 63.11157]

d. The Permittee shall submit a notification of the date of initial startup of the tilting refinery furnace **(ID No. ES-TRF-1)**, postmarked no later than 15 days after initial startup. In the notification of initial startup, the Permittee shall include the design heat capacity of the furnace.
e. The Permittee must submit a notification of compliance status in accordance with §63.9(h) and must include the following:
    i. The results of the initial performance tests and monitoring data collected during the test.
    ii. The certification of compliance, signed by a responsible official, for the work practice standard in §63.1155(b): "This facility complies with the requirement for a capture system for each smelting furnace, melting furnace, or other vessel that contains molten material in accordance with §63.11155(b)."
    iii. The certification of compliance, signed by a responsible official, for the work practice standard in §63.11155(c): "This facility complies with the requirement for a written plan for the selection, inspection, and pretreatment of copper scrap in accordance with §63.11155(c)."
    iv. The certification of compliance, signed by a responsible official, for the work practice standard in §63.11155(d)(2): "This facility has an approved monitoring plan in accordance with §63.11155(d)(2)."
    v. The certification of compliance, signed by a responsible official, for the work practice standard in §63.11155(g): "This facility has an approved monitoring plan in accordance with §63.11155(g)."

Testing [15A NCAC 02Q .0308(a), 40 CFR 63.11154, and 40 CFR 63.11155]

f. The Permittee shall conduct a performance test to demonstrate initial compliance with the PM emissions limit within 180 days after startup and report the results in your notification of compliance status. The Permittee must conduct each PM test according to §63.7(e)(1) using the test methods and procedures in Section 6.d.i. through v. below.
    i. Method 1 or 1A (40 CFR part 60, appendix A) to select sampling port locations and the number of traverse points in each stack or duct. Sampling sites must be located at the outlet of the control device (or at the outlet of the emissions source if no control device is present) prior to any releases to the atmosphere.
    ii. Method 2, 2A, 2C, 02D, 2F, or 2G (40 CFR part 60, appendix A) to determine the volumetric flow rate of the stack gas.
    iii. Method 3, 3A, or 3B (40 CFR part 60, appendix A) to determine the dry molecular weight of the stack gas. You may use ANSI/ASME PTC 19.10-1981, "Flue and Exhaust Gas Analyses (incorporated by reference—see §63.14) as an alternative to EPA Method 3B.
    iv. Method 4 (40 CFR part 60, appendix A) to determine the moisture content of the stack gas.
    v. Method 5 (40 CFR part 60, appendix A) to determine the PM concentration for negative pressure baghouses and Method 5D (40 CFR part 60, appendix A) for positive pressure baghouses. The sampling time and volume for each run must be at least 60 minutes and 0.85 dry standard cubic meters (30 dry standard cubic feet). A minimum of three valid test runs are needed to comprise a PM performance test.
g. The Permittee shall conduct subsequent performance tests to demonstrate compliance with the PM emissions limit at least once every 5 years.

Monitoring [15A NCAC 02Q .0308(a) and 40 CFR 63.11155]

h. The Permittee must prepare and operate at all times according to a written plan for the selection, inspection, and pretreatment of copper scrap to minimize, to the extent practicable, the amount of oil and plastics in the scrap that is charged to the smelting furnace. The Permittee plan must include a training program for scrap inspectors. The Permittee must keep records to demonstrate continuous compliance with the requirements of your plan. The Permittee must keep a current copy of your pollution prevention plan onsite and available for inspection.

i. The Permittee must install, operate, and maintain a bag leak detection system on all baghouses used to comply with the PM emissions limit in paragraph 7.b. of this section according to paragraph 7.i.(1) of this section, prepare and operate by a site-specific monitoring plan according to paragraph 7.i.(2) of this section, take corrective action according to paragraph 7.i.(3) of this section, and record information according to paragraph 7.j. of this section.

(1) Each bag leak detection system must meet the specifications and requirements below:

i. The bag leak detection system must be certified by the manufacturer to be capable of detecting PM emissions at concentrations of 1 milligram per actual cubic meter (0.00044 grains per actual cubic foot) or less.

ii. The bag leak detection system sensor must provide output of relative PM loadings. The owner or operator must continuously record the output from the bag leak detection system using electronic or other means (e.g., using a strip chart recorder or a data logger.)

iii. The bag leak detection system must be equipped with an alarm system that will sound when the system detects an increase in relative particulate loading over the alarm set point established according to paragraph i.(1) iv. of this section, and the alarm must be located such that it can be heard by the appropriate plant personnel.

iv. In the initial adjustment of the bag leak detection system, you must establish, at a minimum, the baseline output by adjusting the sensitivity (range) and the averaging period of the device, the alarm set points, and the alarm delay time.

v. Following initial adjustment, you must not adjust the averaging period, alarm set point, or alarm delay time without approval from the Administrator or delegated authority except as provided in paragraph i.(1) vi. of this section.

vi. Once per quarter, you may adjust the sensitivity of the bag leak detection system to account for seasonal effects, including temperature and humidity, according to the procedures identified in the site-specific monitoring plan required by paragraph i.(2) of this section.

vii. The Permittee must install the bag leak detection sensor downstream of the baghouse and upstream of any wet scrubber.

viii. Where multiple detectors are required, the system's instrumentation and alarm may be shared among detectors.

(2) The Permittee must develop and submit to the DAQ Stationery Source and Compliance Branch for approval a site-specific monitoring plan for each bag leak detection system. The Permittee must operate and maintain the bag leak detection system according to the site-specific monitoring plan at all times. Each monitoring plan must describe the items in paragraphs i.(2)(i) through (vi) of this section.

i. Installation of the bag leak detection system;

ii. Initial and periodic adjustment of the bag leak detection system, including how the alarm set-point will be established;

iii. Operation of the bag leak detection system, including quality assurance procedures;

iv. How the bag leak detection system will be maintained, including a routine maintenance schedule and spare parts inventory list;

v. How the bag leak detection system output will be recorded and stored; and

vi. Corrective action procedures as specified in paragraph i.(3) of this section. In approving the site-specific monitoring plan, the DAQ Stationery and Compliance Branch may allow owners and operators more than 3 hours to alleviate a specific condition that causes an alarm if the owner or operator identifies in the monitoring plan this specific condition as one that could lead to an alarm, adequately explains why it is not feasible to alleviate this specific condition

within 3 hours of the time the alarm occurs, and demonstrates that the requested time will ensure alleviation of this condition as expeditiously as practicable.

(3) For each bag leak detection system, you must initiate procedures to determine the cause of every alarm within 1 hour of the alarm. Except as provided in paragraph i.(2) vi. of this section, you must alleviate the cause of the alarm within 3 hours of the alarm by taking whatever corrective action(s) are necessary. Corrective actions may include, but are not limited to the following:
   i. Inspecting the baghouse for air leaks, torn or broken bags or filter media, or any other condition that may cause an increase in particulate emissions;
   ii. Sealing off defective bags or filter media;
   iii. Replacing defective bags or filter media or otherwise repairing the control device;
   iv. Sealing off a defective baghouse compartment;
   v. Cleaning the bag leak detection system probe or otherwise repairing the bag leak detection system; or
   vi. Shutting down the process producing the particulate emissions.

Recordkeeping [15A NCAC 02Q .0308(a) and 40 CFR 63.11155]

j. The Permittee must maintain records of the information specified in paragraphs j.(i) through (iii) of this section for each bag leak detection system.
   i. Records of the bag leak detection system output;
   ii. Records of bag leak detection system adjustments, including the date and time of the adjustment, the initial bag leak detection system settings, and the final bag leak detection system settings; and
   iii. The date and time of all bag leak detection system alarms, the time that procedures to determine the cause of an alarm were initiated, whether procedures were initiated within 1 hour of the alarm, the cause of the alarm, an explanation of the actions taken, the date and time the cause of the alarm was alleviated, and whether the alarm was alleviated within 3 hours of the alarm.

Reporting [15A NCAC 02Q .0308(a)]

k. The Permittee shall submit the performance test data from the initial performance test and the results of the performance evaluation within 60 days of completing the test.
l. The Permittee shall submit a summary report of monitoring and recordkeeping activities given in Section 7.i. and j. above postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

8. CONTROL AND PROHIBITION OF ODOROUS EMISSIONS - As required by 15A NCAC 02D .1806 "Control and Prohibition of Odorous Emissions" the Permittee shall not operate the facility without implementing management practices or installing and operating odor control equipment sufficient to prevent odorous emissions from the facility from causing or contributing to objectionable odors beyond the facility's boundary.

9. Federal and State Rules Applicable to Sources Exempted from Air Permitting Requirements - Your facility is subject to the following federal and state rules:

40 CFR 60 - NSPS -- Subpart IIII -- Stationary Compression Ignition Internal Combustion Engines
40 CFR 63 - NESHAP/GACT -- Subpart ZZZZ -- Stationary Reciprocating Internal Combustion Engines

which are applicable to some of the emission sources at your facility listed on the "Insignificant/Exempt

Activities" list attached to this permit. The purpose of this permit condition is to inform you of your compliance obligations to these applicable rules as they are enforceable.

10. 15A NCAC 02Q .0317: AVOIDANCE CONDITIONS for 15A NCAC 02D .0530: PREVENTION OF SIGNIFICANT DETERIORATION - In order to avoid applicability of 15A NCAC 02D .0530(g), facility-wide emission sources shall discharge into the atmosphere less than 100 tons of particulate matter (PM), particulate matter 10 (PM_{10}), particulate matter 2.5 ($PM_{2.5}$), and nitrogen oxide (NO_x) for each pollutant per consecutive 12-month period.

    a. To ensure that the limit established above is not exceeded for PM, PM_{10}, and $PM_{2.5}$, the facility shall meet all emission limits and fabric filter requirements per 40 CFR Part 63, Subpart FFFFFF, National Emission Standards for Hazardous Air Pollutants for Secondary Copper Smelting Area Sources listed in Section 7 of this permit.

    b. To ensure that the limit established above is not exceeded for NO_x, the facility shall combust no more than 920 million standard cubic feet of natural gas from the tilting refinery furnace (ID No. ES-TRF-1) and limit the diesel-fired emergency generator (ID No. I-EG-1) to no more than 500 hours per year.

    Monitoring and Recordkeeping [15A NCAC 02Q .0308(a)]

    c. Fabric filters, cartridge filters, baghouses, and/or other dry filter particulate collection devices shall be controlled as described in the permitted equipment list. To comply with the provisions of this permit and ensure that emissions do not exceed the regulated limits, the Permittee shall perform periodic inspections and maintenance (I&M) as recommended by the manufacturer. In addition, the Permittee shall perform an annual (for each 12 month period following the initial inspection) internal inspection of each fabric filter system.

    d. The Permittee shall calculate the total emissions of PM, PM_{10}, $PM_{2.5}$, and NO_x monthly for each pollutant and shall record the emissions monthly in a logbook (written or electronic format) kept on-site and made available to DAQ personnel upon request.

    Reporting Requirements [15A NCAC 02Q .0308(a)]

    e. The Permittee shall submit the results of any maintenance performed on the fabric filter (ID No. CD-BH-1) within 30 days of a written request by the DAQ.

    f. The Permittee shall submit a semi-annual summary report, acceptable to the Regional Air Quality Supervisor, of monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December, and July 30 of each calendar year for the preceding six-month period between January and June. The report shall contain the monthly PM, PM_{10}, $PM_{2.5}$, and NO_x emissions for the previous 17 months. The emissions must be calculated for each of the 12-month periods over the previous 17 months.

    g. All instances of deviations from the requirements of this permit must be clearly identified.

11. 15A NCAC 02Q .0317: AVOIDANCE CONDITIONS for 15A NCAC 02D .1112: {(112(g)} CASE BY CASE MAXIMUM ACHIEVABLE CONTROL TECHNOLOGY - In order to remain classified a minor source for hazardous air pollutants (HAP) and avoid applicability of 15A NCAC 02D .1111, "Maximum Achievable Control Technology," facility-wide HAP emissions shall be less than 25 tons per consecutive 12-month period of total, combined HAP and 10 tons per consecutive 12-month period of any individual HAP.

    Testing [15A NCAC 02Q .0308(a)]

    a. Initial Performance Tests – Under the provisions of North Carolina General Statute 143-215.108, the Permittee shall establish emission factors for HAPs by conducting an initial performance test on the dry sorbent injection system (ID No. CD-DSI-1) used to control the tilting refinery furnace.

Hydrogen chloride shall be tested from the dry sorbent injection system (ID. No. CD-DSI-1) via the fabric filter (ID No. CD-BH-1).

i. The Permittee shall submit a protocol to DAQ at least 45 days prior to initial compliance testing and shall submit a notification of initial compliance testing at least 15 days in advance of the testing.
ii. The Permittee shall install, calibrate, operate, maintain, and inspect a continuous dry sorbent injection rate instrument in accordance with manufacturer's recommendations for the dry sorbent injection system (ID Nos. CD-DSI-1). To ensure compliance and effective operation of the injection system, the Permittee shall maintain a daily dry sorbent injection rate at or above the minimum established during the most recent performance testing. The Permittee shall maintain records of the dry sorbent injection rate.
iii. Testing shall be completed and the results submitted to the DAQ within 180 days of commencement of operation of the new source.
iv. The Permittee shall notify the Regional Supervisor, DAQ, within 30 days following the commencement of operation of the new source.
v. The Permittee shall submit a written report of the test results to the Regional Supervisor, DAQ, within 60 days of completion of the test.

b. Periodic Performance Tests – Under the provisions of North Carolina General Statute 143-215.108, the Permittee shall establish emission factors for HAPs by conducting periodic performance test on the dry sorbent injection system (ID No. CD-DSI-1) used to control the tilting refinery furnace. Hydrogen chloride shall be tested from the dry sorbent injection system (ID. No. CD-DSI-1) via the fabric filter (ID No. CD-BH-1).

i. The Permittee shall conduct periodic compliance testing in accordance with a testing protocol approved by the DAQ.
ii. The Permittee shall submit a protocol to DAQ at least 45 days prior to periodic compliance testing and shall submit a notification of periodic compliance testing at least 15 days in advance of the testing.
iii. The Permittee shall be responsible for ensuring, within practicable limits, that the equipment or processes being tested are operated at or near the maximum normal production rate.
iv. At a minimum, the Permittee shall conduct periodic performance tests annually. Annual performance tests shall be completed no later than 13 months after the previous performance test
v. The Permittee shall conduct the periodic performance test and submit a written report of the test results to the DAQ within 90 days unless an alternate date is approved in advance by DAQ,
vi. The Permittee may request that the performance tests be conducted less often if the performance tests for at least 3 consecutive years show compliance with the emission limit. If the request is granted, the Permittee shall conduct a performance test no more than 36 months after the previous performance test for the given pollutant.
vii. If a performance test shows noncompliance with an emission limit for a given pollutant, the Permittee shall return to conducting annual performance tests (no later than 13 months after the previous performance test) for that pollutant.
viii. The Permittee shall submit a written report of results for any periodic performance test to the DAQ, not later than 30 days after sample collection, in accordance with 15A NCAC 02D .2602(h).
ix. The Permittee may re-establish any parametric operating value during periodic testing. Compliance with previously approved parametric operating values is not required during periodic required testing or other tests undertaken to re-establish parametric operating values by the Permittee.
x. The Permittee shall comply with applicable emission standards at all times, including

during periods of testing.

Monitoring/Recordkeeping [15A NCAC 02Q .0308(a)]

c. Monitoring and recordkeeping and reporting shall be performed in accordance with the following:
   i. Hydrogen chloride emissions shall be controlled as described in the permitted equipment list. To comply with the provisions of this permit and ensure that emissions do not exceed the regulated limits, the Permittee shall perform periodic inspections and maintenance (I&M) as recommended by the manufacturer. In addition, the Permittee shall perform an annual (for each 12 month period following the initial inspection) inspection of the dry sorbent injection system including the spray nozzles.
   ii. A log book (in written or electronic format) shall be kept on site the dry sorbent injection system and made available to Division of Air Quality personnel upon request. The Permittee shall record all inspection, maintenance and monitoring requirements listed above in the log book. Any variance from the manufacturer's recommendations shall be investigated with corrections made and date of actions recorded in the log book.
   iii. The Permittee shall record the average daily dry sorbent injection rate and shall record the emissions monthly in a logbook (written or electronic format) kept on-site and made available to DAQ personnel upon request.
   iv. The Permittee shall not process more than 365 batches of product per year. The batches shall be recorded monthly in a logbook (written or electronic format) kept on-site and made available to an authorized representative upon request.
   v. The Permittee shall calculate the total emissions of hydrogen chloride monthly and shall record the emissions monthly in a logbook (written or electronic format) kept on-site and made available to DAQ personnel upon request.

Reporting Requirements [15A NCAC 02Q .0308(a)]

d. The Permittee shall submit the results of any maintenance performed on the dry sorbent injection system (ID No. CD-DSI-1) within 30 days of a written request by the DAQ.

e. The Permittee shall submit a semi-annual summary report, acceptable to the Regional Air Quality Supervisor, of monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December, and July 30 of each calendar year for the preceding six-month period between January and June. The report shall contain the following the monthly hydrogen chloride emissions for the previous 17 months. The emissions must be calculated for each of the 12-month periods over the previous 17 months.

f. All instances of deviations from the requirements of this permit must be clearly identified.

12. 15A NCAC 02Q .0207: ANNUAL EMISSIONS REPORTING- Pursuant to 15A NCAC 02Q .0207, the Permittee shall report by June 30 of each year the actual emissions of each air pollutant listed in 15A NCAC 02Q .0207(a) from each emission source within the facility during the previous calendar year. The report shall be in or on such form as may be established by the Director. The accuracy of the report shall be certified by the responsible official of the facility.

13. 15A NCAC 02Q. 0304: APPLICATIONS- Pursuant to 15A NCAC 02Q .0304, the Permittee, at least 90 days prior to the expiration date of this permit, shall request permit renewal by letter in accordance with 15A NCAC 02Q .0304(d) and (f). Pursuant to 15A NCAC 02Q .0203(i), no permit application fee is required for renewal of an existing air permit. The renewal request should be submitted to the Regional Supervisor, DAQ.

14. 15A NCAC 02Q .0504: OPTION FOR OBTAINING CONSTRUCTION AND OPERATION

PERMIT

Permitting [15A NCAC 02Q .0504(d)]

a. Pursuant to 15A NCAC 02Q .0501(b)(2), for completion of the two-step Greenfield significant modification process initiated by Application No. 10674R00, the Permittee shall file an amended application following the procedures of Section 15A NCAC 02Q .0500 within one year from the date of beginning operation of any of these sources (ID Nos. TRF-1, SILO-1, I-ACW-1, I-CT, I-MAT-1, and I-EG-1).

Reporting [15A NCAC 02Q .0508(f)]

b. The Permittee shall notify the Regional Office in writing of the date of beginning operation of any of these sources (ID Nos. TRF-1, SILO-1, I-ACW-1, I-CT, I-MAT-1, and I-EG-1), postmarked no later than 30 days after such date.

B. GENERAL CONDITIONS AND LIMITATIONS

1. In accordance with G.S. 143-215.108(c)(1), TWO COPIES OF ALL DOCUMENTS, REPORTS, TEST DATA, MONITORING DATA, NOTIFICATIONS, REQUESTS FOR RENEWAL, AND ANY OTHER INFORMATION REQUIRED BY THIS PERMIT shall be submitted to the:

   Regional Supervisor
   North Carolina Division of Air Quality
   Mooresville Regional Office
   610 East Center Avenue, Suite 301
   Mooresville, NC 28115
   704-663-1699

   For identification purposes, each submittal should include the facility name as listed on the permit, the facility identification number, and the permit number.

2. RECORDS RETENTION REQUIREMENT - In accordance with 15A NCAC 02D .0605, any records required by the conditions of this permit shall be kept on site and made available to DAQ personnel for inspection upon request. These records shall be maintained in a form suitable and readily available for expeditious inspection and review. These records must be kept on site for a minimum of 2 years, unless another time period is otherwise specified.

3. ANNUAL FEE PAYMENT - Pursuant to 15A NCAC 02Q .0203(a), the Permittee shall pay the annual permit fee within 30 days of being billed by the DAQ. Failure to pay the fee in a timely manner will cause the DAQ to initiate action to revoke the permit.

4. EQUIPMENT RELOCATION - In accordance with 15A NCAC 02Q .0301, a new air permit shall be obtained by the Permittee prior to establishing, building, erecting, using, or operating the emission sources or air cleaning equipment at a site or location not specified in this permit.

5. REPORTING REQUIREMENT - In accordance with 15A NCAC 02Q .0309, any of the following that would result in previously unpermitted, new, or increased emissions must be reported to the Regional Supervisor, DAQ:

   a. changes in the information submitted in the application regarding facility emissions;

   b. changes that modify equipment or processes of existing permitted facilities; or

c. changes in the quantity or quality of materials processed.

If appropriate, modifications to the permit may then be made by the DAQ to reflect any necessary changes in the permit conditions. In no case are any new or increased emissions allowed that will cause a violation of the emission limitations specified herein.

6. In accordance with 15A NCAC 02Q .0309, this permit is subject to revocation or modification by the DAQ upon a determination that information contained in the application or presented in the support thereof is incorrect, conditions under which this permit was granted have changed, or violations of conditions contained in this permit have occurred. In accordance with G.S. 143-215.108(c)(1), the facility shall be properly operated and maintained at all times in a manner that will effectuate an overall reduction in air pollution. Unless otherwise specified by this permit, no emission source may be operated without the concurrent operation of its associated air cleaning device(s) and appurtenances.

7. In accordance with G.S. 143-215.108(c)(1), this permit is nontransferable by the Permittee. Future owners and operators must obtain a new air permit from the DAQ.

8. In accordance with G.S. 143-215.108(c)(1), this issuance of this permit in no way absolves the Permittee of liability for any potential civil penalties which may be assessed for violations of State law which have occurred prior to the effective date of this permit.

9. In accordance with G.S. 143-215.108(c)(1), this permit does not relieve the Permittee of the responsibility of complying with all applicable requirements of any Federal, State, or Local water quality or land quality control authority.

10. In accordance with 15A NCAC 02D .0605, reports on the operation and maintenance of the facility shall be submitted by the Permittee to the Regional Supervisor, DAQ at such intervals and in such form and detail as may be required by the DAQ. Information required in such reports may include, but is not limited to, process weight rates, firing rates, hours of operation, and preventive maintenance schedules.

11. A violation of any term or condition of this permit shall subject the Permittee to enforcement pursuant to G.S. 143-215.114A, 143-215.114B, and 143-215.114C, including assessment of civil and/or criminal penalties.

12. Pursuant to North Carolina General Statute 143-215.3(a)(2), no person shall refuse entry or access to any authorized representative of the DAQ who requests entry or access for purposes of inspection, and who presents appropriate credentials, nor shall any person obstruct, hamper, or interfere with any such representative while in the process of carrying out his official duties. Refusal of entry or access may constitute grounds for permit revocation and assessment of civil penalties.

13. In accordance with G.S. 143-215.108(c)(1), this permit does not relieve the Permittee of the responsibility of complying with any applicable Federal, State, or Local requirements governing the handling, disposal, or incineration of hazardous, solid, or medical wastes, including the Resource Conservation and Recovery Act (RCRA) administered by the Division of Waste Management.

14. PERMIT RETENTION REQUIREMENT - In accordance with 15A NCAC 02Q .0110, the Permittee shall retain a current copy of the air permit at the site. The Permittee must make available to personnel of the DAQ, upon request, the current copy of the air permit for the site.

15. CLEAN AIR ACT SECTION 112(r) REQUIREMENTS - Pursuant to 15A NCAC 02D .2100 "Risk Management Program," if the Permittee is required to develop and register a risk management plan pursuant to Section 112(r) of the Federal Clean Air Act, then the Permittee is required to register this plan with the USEPA in accordance with 40 CFR Part 68.

16. PREVENTION OF ACCIDENTAL RELEASES - GENERAL DUTY - Pursuant to Title I Part A Section 112(r)(1) of the Clean Air Act "Hazardous Air Pollutants - Prevention of Accidental Releases - Purpose and General Duty," although a risk management plan may not be required, if the Permittee produces, processes, handles, or stores any amount of a listed hazardous substance, the Permittee has a general duty to take such steps as are necessary to prevent the accidental release of such substance and to minimize the consequences of any release. **This condition is federally-enforceable only.**

17. GENERAL EMISSIONS TESTING AND REPORTING REQUIREMENTS - If emissions testing is required by this permit, or the DAQ, or if the Permittee submits emissions testing to the DAQ in support of a permit application or to demonstrate compliance, the Permittee shall perform such testing in accordance with 15A NCAC 02D .2600 and follow all DAQ procedures including protocol approval, regional notification, report submittal, and test results approval. Additionally, in accordance with 15A NCAC 02D .0605, the Permittee shall follow the procedures for obtaining any required audit sample and reporting those results.

Permit issued this the XXth of November, 2020.

NORTH CAROLINA ENVIRONMENTAL MANAGEMENT COMMISSION

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William D. Willets, P.E., Chief, Permitting Section

Division of Air Quality, NCDEQ
By Authority of the Environmental Management Commission

Air Permit No. 10674R00

ATTACHMENT to Permit No. 10659R00, November XX, 2020

Insignificant / Exempt Activities

Source	Exemption Regulation	Source of TAPs?	Source of Title V Pollutants?
I-ACW-1 - anode casting wheel	02Q .0102 (h)(5)	No	Yes
I-CT - two cooling towers	02Q .0102 (h)(5)	No	No
I-MAT-1 - scrap and slag material handling operations	02Q .0102 (h)(5)	No	No
I-EG-1 - diesel-fired emergency generator (200 horsepower capacity) subject to NSPS Subpart IIII and NESHAP Subpart ZZZZ	02Q .0102 (h)(5)	No	Yes

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1. Because an activity is exempted from being required to have a permit or permit modification does not mean that the activity is exempted from an applicable requirement or that the owner or operator of the source is exempted from demonstrating compliance with any applicable requirement.

2. When applicable, emissions from stationary source activities identified above shall be included in determining compliance with the permit requirements for toxic air pollutants under 15A NCAC 02D .1100 "Control of Toxic Air Pollutants" or 02Q .0711 "Emission Rates Requiring a Permit."

3. Sample permit conditions showing the regulatory requirements for exempt sources subject to NESHAP, NSPS, and NCAC rules may be found here: https://deq.nc.gov/aqpermitconditions